



**Steven W. Troxler**  
Commissioner

## North Carolina Department of Agriculture and Consumer Services

March 20, 2019

Tawanda Maignan, Team Leader  
Emergency Response Team  
US EPA Office of Pesticide Programs  
Document Processing Desk  
2777 Crystal Drive  
Arlington, VA 22202

Dear Ms. Maignan,

This letter notifies the EPA that I am requesting the renewal of North Carolina's 2018 Specific Exemption under Section 18 of FIFRA that allowed the use of the insecticide Transform WG (EPA Reg.# 62719-625) to control sugarcane aphid in grain sorghum grown in our state. Sulfoxaflor is the active ingredient in Transform WG. Dow AgroSciences is again supporting this use for 2019.

According to Dr. Dominic Reisig, Associate Professor of Entomology and extension specialist at N.C. State University, the sugarcane aphid continues to pose a threat to sorghum grown in North Carolina. During the summer, this insect can double its population in as little as one-and-a-half days and can subject growers to significant losses if left unchecked. Sivanto Prime is registered for use on sorghum and it can provide control of this insect. However, it is widely known that aphids can quickly develop resistance. Having Transform WG available will provide growers an effective way to control this pest as well as assist with resistance management. Based on the presence of the sugarcane aphid in North Carolina during the past four years and the limited availability of suitable treatment options, we fully expect the need for Transform WG in 2019.

In order to provide North Carolina grain sorghum growers the opportunity to control this devastating pest, I am requesting the renewal of this emergency exemption. Should you have any questions, feel free to contact Dr. Reisig at 252-795-3764 x 133 or by email at [ddreisig@ncsu.edu](mailto:ddreisig@ncsu.edu) or Lee Davis with the NCDA&CS Pesticide Section at 919-857-4165 or by email at [lee.davis@ncagr.gov](mailto:lee.davis@ncagr.gov).

Sincerely,

Steven W. Troxler  
Commissioner

cc: North Carolina Pesticide Board  
Dr. Richard H. Linton, Dean, College of Agriculture and Life Sciences, NCSU  
Dan Weathington, Executive Director, Small Grain Growers Association  
Jamey Thomas, Ph.D., U.S. Regulatory Manager, Dow AgroSciences  
Dr. Dominic Reisig, Associate Professor of Entomology, NCSU

**STREAMLINED REPEAT REQUEST**  
**SECTION 18 SPECIFIC EXEMPTION**  
**NORTH CAROLINA**  
**March 21, 2019**

**USE BEING REQUESTED**

ACTIVE INGREDIENT:	SULFOXAFLOX
BRAND NAMES:	TRANSFORM WG
EPA REG. NUMBERS:	62719-625
SITE:	SORGHUM
PEST:	SUGARCANE APHID
FULL APPLICATION DATE:	JULY 7, 2015
FULL APPLICATION ID#:	15NC08
YEARS REQUESTED:	FIRST SPECIFIC EXEMPTION REQUEST WAS GRANTED IN 2015 AND GRANTED AGAIN IN 2016, 2017 AND 2018.

Situation:

1. The emergency condition(s) described in the previously submitted emergency exemption application continues to exist.

*The situation with regard to the need for an emergency label is identical.*

2. All information submitted in the previously submitted emergency exemption application is still accurate: or except as expressly identified in the submitted recertification application, all information submitted in the previously submitted emergency exemption application is still accurate.

*All of the information submitted in our 2018 emergency exemption request is still accurate.*

3. The proposed conditions of use are identical to the conditions of use EPA approved previously (indicate ID# and date); or the proposed conditions of use are identical to the conditions of use EPA approved for the previous emergency exemption (indicate ID# and date) except as expressly identified (explanation attached).

*The conditions of use are identical to those conditions approved by the EPA in 2018.  
(ID# 18NC02, Date: March 14, 2018)*

4. There are no additional conditions or limitations on the eligibility for recertification identified in the previous notice of approval; or any conditions or limitations on the eligibility for recertification identified in the previous notice of approval of the exemption have been responded to (explanation attached).

*No additional conditions or limitations were identified in the previous notice of approval.*

5. The applicant has not newly become aware of any alternative chemical or nonchemical practice that may offer a meaningful level of pest control; or if any such new alternative controls are available, documentation is provided that demonstrates that each such known chemical or practice does not provide adequate control or is not economically or environmentally feasible (explanation attached).

*Sivanto Prime is approved and effective. However, this was already listed in the original 2015 application and nothing has changed with registration. Transform is needed as a rotational insecticide.*

*No new alternative chemicals or nonchemical practices have been identified that will provide acceptable control of this pathogen.*

NC STATE UNIVERSITY

College of Agriculture and Life Sciences  
Gardner Hall  
Campus Box 7613  
Raleigh, NC 27695-7613

919.515.2703 (phone)  
919.515.7746 (fax)

March 3, 2019

To Whom It May Concern:

This letter is to support the granting of a Section 18 Emergency Exemption for Transform WG in North Carolina sorghum.

The sugarcane aphid, *Melanaphis sacchari*, first identified on sorghum during 2013 in Louisiana had spread from the eastern shore of Virginia to the Pacific coast of Mexico by 2015. Annually, since 2015, North Carolina growers experienced invasions from this insect, which cannot overwinter in the state, starting in July and persisting through harvest. Growers can experience yield loss from this insect ranging from 21-100%, depending on the growth stage when the aphid infestation occurs. In addition, the growth capacity of this insect is alarming, since populations can double in 1 ½ days during the summer.

There are very few limited management tools for this insect. We know some hybrids that have tolerance or resistance, but I anticipate that every sorghum field planted in North Carolina during 2019 will be at risk of loss from this insect and may require a treatment. Up to 25,000 acres of sorghum could be treated with Transform at least twice for this insect in our state (50,000 acres total) during 2019. There is only one registered insecticide available that is consistently effective for this aphid- Sivanto Prime. Aphids are organisms that can rapidly develop resistance. In addition to the need for tools in resistance management, the Sivanto Prime label has a 21 day preharvest interval restriction. Treatments are sometimes warranted even closer to harvest, as this insect moves up into the heads, dropping honeydew, even when the grain is mature.

During the previous three years, we have received a Section 18 for Transform to control of sugarcane aphids in grain sorghum. I believe that our case in North Carolina is similar during 2019 and this insecticide will be greatly needed during this field season

Sincerely,



Dominic Reisig, Ph.D.  
Associate Professor & Extension Specialist  
Department of Entomology and Plant Pathology  
North Carolina State University  
The Vernon James Research and Extension Center  
207 Research Station Road  
Plymouth, NC 27962  
252.793.4428 x133 (office)  
252.505.2082 (cell)



**Dow AgroSciences**

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**Dow AgroSciences LLC**

9330 Zionsville Road  
Indianapolis, IN 46163

**dowagro.com**

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March 8, 2019

Dr. Dominic Reisig  
Associate Professor & Extension Specialist  
Department of Entomology  
North Carolina State University  
The Vernon James Research & Extension Center  
207 Research Station Road  
Plymouth, NC 27962

Re: Support letter for Transform™ WG Section 18 on sorghum

Dear Dr. Reisig,

Per your request, this letter is to confirm that Dow AgroSciences supports the pursuit of a Section 18 emergency exemption for Transform WG to control sugarcane aphid in sorghum in the state of North Carolina. Transform WG has provided excellent efficacy against the sugarcane aphid in previous use under Section 18 exemptions, with no negative impacts on non-target insects. It also represents a new class of chemistry with a novel mode of action, and controls pests resistant to other classes of chemistry.

If you have questions, please do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jamey Thomas".

Jamey Thomas, Ph.D.  
US Regulatory Manager  
Dow AgroSciences

cc: Tami Jones-Jefferson, DAS  
Randy Huckaba, DAS

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**NC STATE RESTRICTED USE PESTICIDE:** WHEN USED IN NORTH CAROLINA, APPLICATIONS CAN ONLY BE MADE BY LICENSED/CERTIFIED APPLICATORS OR BY PERSONS UNDER THEIR DIRECT SUPERVISION AND ONLY FOR THOSE USES COVERED BY THE LICENSED/CERTIFIED APPLICATORS CERTIFICATION.



**Dow AgroSciences**

**Dow AgroSciences LLC**

**9330 Zionsville Road**

**Indianapolis, IN 46268-1054 USA**

## **Transform® WG**

**EPA Reg. No.: 62719-625**

**For Control of Sugarcane Aphid (*Melanaphis sacchari*) in Sorghum**

**Section 18 Emergency Exemption**

**File symbol: 19NCXX**

**FOR DISTRIBUTION AND USE ONLY IN THE FOLLOWING COUNTIES IN NORTH CAROLINA  
UNDER SECTION 18 EMERGENCY EXEMPTION:**

**ALAMANCE, ANSON, BEAUFORT, BERTIE, BLADEN, CABARRUS, CAMDEN, CARTERET,  
CASWELL, CHATHAM, CHOWAN, COLUMBUS, CRAVEN, CUMBERLAND, CURRITUCK, DARE,  
DAVIDSON, DUPLIN, DURHAM, EDGECOMBE, FRANKLIN, GATES, GRANVILLE, GREEN,  
GUILFORD, HALIFAX, HARNETT, HERTFORD, HOKE, HYDE, JOHNSTON, JONES, LEE, LENOIR,  
MARTIN, MECKLENBURG, MONTGOMERY, MOORE, NASH, NORTHAMPTON, ONSLOW, ORANGE,  
PAMLICO, PASQUOTANK, PENDER, PERQUIMANS, PERSON, PITT, RANDOLPH, RICHMOND,  
ROBESON, ROCKINGHAM, ROWAN, SAMPSON, SCOTLAND, STANLY, TYRRELL, UNION, VANCE,  
WAKE, WARREN, WASHINGTON, WAYNE, AND WILSON.**

**This Section 18 Emergency Exemption is effective XXXXX and expires XXXXX.**

- This labeling must be in the possession of the user at the time of application.
- It is in violation of federal law to use this product in a manner inconsistent with its labeling.
- Read the label affixed to the container for Transform® WG insecticide before applying. Carefully follow all precautionary statements and applicable use directions.
- Any adverse effects resulting from the use of Transform WG under this emergency exemption must be immediately reported to the North Carolina Department of Agriculture and Consumer Services.

**Environmental Hazards Statement:** This product is highly toxic to bees exposed through contact during spraying and while spray droplets are still wet. This product may be toxic to bees exposed to treated foliage for up to 3 hours following application. Toxicity is reduced when spray droplets are dry. Risks to managed and native pollinators from contact with pesticide spray or residues can be minimized when applications are made before 7:00 a.m. or after 7:00 p.m. local time or when the temperature is below 55 degrees Fahrenheit (°F) at the site of application.

## **Directions for Use**

### **Pests and Application Rates:**

<b>Pests</b>	<b>Transform WG (oz/acre)</b>	<b>Comments</b>
Sugarcane aphid	0.75 – 1.5 (0.023 – 0.047 lb ai/acre)	Use a higher rate in the rate range for heavy pest populations.

**Application Timing:** Treat in accordance with local economic thresholds. Consult your Dow AgroSciences representative, cooperative extension service, certified crop advisor or state agricultural experiment station for any additional local use recommendations for your area.

**Application Method:** Control of sugarcane aphid may be contingent on thorough coverage to the crop. Use sufficient water to get full coverage of the canopy. It is recommended that a minimum of 5 gallons of

water be applied by air.

**Spray Drift Management:** Applications are prohibited above wind speeds of 10 miles per hour (mph). Applications must be made with medium to coarse spray nozzles (i.e., with median droplet size of 341  $\mu\text{m}$  or greater).

**Restrictions:**

- **Preharvest Interval:** Do not apply within 14 days of grain or straw harvest or within 7 days of grazing, or forage, fodder, or hay harvest.
- A restricted entry interval (REI) of 24 hours must be observed.
- Do not make more than two applications per acre per year.
- **Minimum Treatment Interval:** Do not make applications less than 14 days apart.
- Do not apply more than a total of 3.0 oz of Transform WG (0.09 lb ai of sulfoxaflor) per acre per year.
- Do not apply product  $\leq$  3 days pre-bloom or until after seed set.

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R396-237

Approved: \_\_/\_\_/\_\_

Replaces 396-198

## **SECTION 18 FINAL REPORT 2018**

Transform for Sugarcane Aphid in North Carolina Sorghum  
File Symbol Number: 18NC02

1. **Total acreage, amount of commodity or other unit treated:** 1000 acres of sorghum were treated in North Carolina in 2018.
2. **A discussion of the effectiveness of the pesticide in dealing with the emergency condition:** When applied correctly and achieving adequate coverage, Transform is 98-99% effective compared to untreated controls. There were no complaints of poor product performance reported to extension entomology during 2018.
3. **A description of any unexpected adverse effects which resulted from the use of the pesticide under the exemption:** None
4. **The results of any monitoring required and/or carried out under the exemption:** Monitoring was not required, but, as in 2014-2017, sugarcane aphid started appearing in North Carolina sorghum during July 2018 and persisted in this crop through harvest. The aphid was confirmed in 30 North Carolina counties during 2016, but only nine counties during 2017 and even fewer counties during 2018. This was likely a function of lighter pressure during 2017 and 2018 compared to 2016 and also the fact that more growers were expecting the aphid and not reporting presence. Although populations were still present on Johnsongrass through December, they were killed by cold weather in January. A university replicated trial conducted during 2016 confirmed that the labeled recommended rates of Sivanto and Transform were the only adequate insecticide control methods. Furthermore, although Sivanto is registered in sorghum, it is expensive in a crop with such low margins. Both products are needed to prevent development of resistance, which is common in aphids.
5. **A discussion of any enforcement actions taken in connection with the exemption:** NA
6. **Methods of disposition of a food crop, if required to be destroyed under the exemption:** NA
7. **Any other information requested by the Administrator:** NA
8. **In cases where a crisis exemption was declared, an explanation as to why there was a need to utilize the crisis provisions:** NA